

**ABSTRACT OF THE DISCLOSURE**

LMW-K5-N,O-oversulfates are described, having a sulfation degree of from 3.2 to 4 and a mean molecular weight of from about 3,000 to about 6,000, obtainable by depolymerization of corresponding K5-N,O-oversulfates or starting from LMW-K5-N-sulfates by O-oversulfation of a tertiary amine or quaternary ammonium salt thereof and subsequent N-resulfation of the K5-amine-O-oversulfate thus obtained. Furthermore, pharmaceutical compositions containing these LMW-K5-N,Ooversulfates having antiangiogenetic and antiviral, in particular anti-HIV-1 activity. Intermediate LMW-K5-N-sulfates are also described.